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Abstract

Stress and coping in couples have received increased research attention during the past two decades, particularly with regard to how couples cope with stress. Dyadic coping has emerged as a strong predictor of relationship satisfaction. Less research has focused on the effects of dyadic coping on other outcomes or family members. In the present study, we addressed this gap by examining parents' dyadic coping as a predictor of children's internalizing symptoms, externalizing symptoms, and prosocial behavior in three independent studies. Studies 1 and 2 use self-report data to assess parents' dyadic coping through the parents' and the children's perspective, and Study 3 includes observational data on dyadic coping. Parental dyadic coping was related to children's externalizing symptoms, internalizing symptoms, and prosocial behavior, although results for the latter two were not consistent across the three studies. Findings suggest that parents' dyadic coping deserves greater consideration within the context of child development.

Keywords: stress, relationship, couple, parenting, conflict, dyadic coping

The Importance of Parents' Dyadic Coping for Children

The notion that the parents' relationship is essential to children's well-being has been a cornerstone of family psychology and family science. Parental divorce and discord are well-established risk factors for child maladjustment (Amato, Kane, & James, 2011; Cummings & Davies, 2010). However, little is known about the association between supportive interparental interactions, such as the way in which couples jointly cope with stress (dyadic coping), and children's development. In the present study, we address this gap by examining dyadic coping in parents as a predictor of children's internalizing symptoms, externalizing symptoms, and prosocial behavior in three studies of healthy, typically developing children.

Stress and coping have received increased attention in couples research throughout the last two decades (Revenson, Kayser, & Bodenmann, 2005). Daily stress plays a crucial role in understanding close relationships, partially because it is toxic to relationship quality and stability (Randall & Bodenmann, 2009). In the process model of parenting (Belsky, 1984), stress caused by work or social and intimate relationships undermines parenting behavior directly as well as indirectly by reducing parents' well-being. Cina and Bodenmann (2009) found that perceived parental stress was statistically associated with inadequate communication and inappropriate parenting, which, in turn, predicted the child's externalizing symptoms a year later.

Given the impact of parental stress on children's well-being, parental coping skills might be an important protective factor. *Dyadic coping* (Bodenmann, 1997, 2000) refers to the way that partners support each other in times of stress and deal jointly with daily stressors. Dyadic coping represents a relational process in which one partner's coping is not independent of the other's. Dyadic coping has been shown to moderate the damaging consequences of stress in couples; it was effective in mitigating the impact of stress on anger and verbal aggression between partners (Bodenmann, Meuwly, Bradbury, Gmelch, & Ledermann, 2010). Dyadic coping has emerged as an important predictor of relationship

satisfaction and stability in numerous studies (Bodenmann, Pihet, & Kayser, 2006; Herzberg, 2012; Papp & Witt, 2010).

Less is known, however, about the role of dyadic coping for children's well-being. Gabriel and Bodenmann (2006) examined positive parenting, individual coping with stress, and dyadic coping with stress as predictors of child-related conflicts. All three variables were negatively associated with child-related conflict with dyadic coping emerging as the strongest predictor. In another study by Bodenmann, Cina, Ledermann, and Sanders (2008), enhancing dyadic coping in parents, through a preventive therapeutic intervention called the *Couples Coping Enhancement Training* (*CCET*; Bodenmann & Shantinath, 2004), not only improved relationship quality but also reduced their children's behavioral problems, albeit to a lesser degree than an evidence-based parenting program (the *Triple P-Positive Parenting Program*; Sanders, 1999). Parents' participation in CCET led to statistically significant decreases in dysfunctional parenting and child maladjustment and these effects were stable over one year. Specifically, after the completion of the program, child misbehavior was reported by the mother to have been reduced by 50% (from 54% of children in the clinically elevated range at pre-test to 27% at post-test) and by the fathers by 70% (from 46% at pre-test to 14% at post-test).

These findings provide preliminary evidence that parental dyadic coping may impact children's well-being. To our knowledge, no studies have examined the parents' dyadic coping as a direct predictor of children's internalizing and externalizing symptoms or prosocial behavior. Two theories help us understand the psychological mechanisms that would account for this relationship. First, emotional security theory (Davies & Cummings, 1994) posits that maintaining felt security and safety in the family is critical for children's healthy development. Compared to children from high-conflict homes, children exposed to constructive conflict and supportive interactions between their parents are expected to develop secure representations of the interparental relationship, that is, children's confidence in their

parents' ability to manage difficulties in order to preserve family stability (Davies & Cummings, 1998). High levels in children's felt emotional security, in turn, are important predictors of fewer internalizing and externalizing symptoms and greater prosocial behavior (Cummings & Davies, 2010). Dyadic coping might be an important process through which children gain emotional security in the family context and become more resilient when problems occur and more adept at enacting prosocial behavior. Second, social learning theory (Bandura, 1977) holds that children watch and imitate their parents, thereby learning how to act in interpersonal situations. Demonstrating appropriate models of supportive interpersonal coping in stressful situations may be a crucial platform to foster social competence in children.

Children are exceptionally sensitive to interparental interactions, including the affective quality of behavior (positivity versus negativity) and the mode of communication (verbal versus nonverbal behaviors; Cummings, Goeke-Morey, & Papp, 2003; Goeke-Morey, Cummings, Harold, & Shelton, 2003). Zemp, Merrilees, and Bodenmann (2014) investigated child adjustment as a function of the proportion of parents' reports of positivity (including dyadic coping) to negativity and found that a greater positive-to-negative ratio was related to lower internalizing and externalizing symptoms, and greater prosocial behavior among their children. Additionally, parents' dyadic coping alleviated the harmful effects of negative interparental interactions on their children.

In sum, there is mounting evidence suggesting that child outcomes may be directly related to parents' dyadic coping. In this paper, we report the results of three independent cross-sectional studies that use different measures and methods to examine parents' dyadic coping as a predictor of their children's internalizing symptoms, externalizing symptoms, and prosocial behavior. Study 1 relies on parental self-report, Study 2 on child self-report, and Study 3 on observational (behavioral) data on the parents as well as self-reports by the children. Our hypothesis for all three studies is that greater parental dyadic coping predicts

lower levels of internalizing and externalizing symptoms and higher levels of prosocial behavior in their children. We control for children's age and gender in all analyses given that previous findings reported that these variables moderate the effects of parental interactions on children (Cummings & Davies, 2010). We examine whether the child's gender moderates the effects of parental dyadic coping on children's internalizing symptoms, externalizing symptoms, and prosocial behavior (Davies & Lindsay, 2001). We detail the methods and findings for each study but provided descriptive statistics across the three studies in Table 1 for the sake of simplicity. At the end, we discuss an overall interpretation of the findings.

Study 1

Method

Participants. Participants were recruited by means of informational flyers distributed in local community centers or via the internet by posting a link on family forums. Inclusion criteria for participation were being in a committed relationship, cohabiting with one's spouse or partner, having at least one child aged 4 to 18 years, and good knowledge of the German language.

Only one parent was asked to participate in the study. Three-hundred and fifty four parents (289 mothers and 65 fathers) living in the same region of Switzerland participated in Study 1. The mean age of participants was 39.7 years (SD = 7.0, range = 20 – 58). The majority were married (84%). Mean relationship duration was 14.8 years (SD = 6.5, range = 1 – 38). The mean age of the children who were rated by their parents for the study was 9.3 years (SD = 4.1, range = 4 – 18); half (51%) were girls and half (49%) were boys. The majority of children (98%) lived with two biological parents; the other seven children had lived with their biological mother and stepfather since they were toddlers.

Procedure. Eligible mothers and fathers completed self-report measures using web survey software (http://www.unipark.com). The survey took most participants between 40 and 50 minutes to complete. Participation was anonymous, informed consent was obtained online

prior to beginning the survey, and no compensation was provided.

Measures.

Dyadic coping. The short (10-item) version of the *Dyadic Coping Inventory* (DCI-K; Bodenmann, 2008a) was used to measure parents' self-reports of how they cope with common daily life stressors with their partner (e.g., "When I am stressed, my partner listens to me and gives me the opportunity to communicate what really bothers me"; "When I am stressed, my partner does not take my stress seriously"; "When one of us is stressed, we consider it as our stress"). Response options for each item ranged from *very rarely* (1) to *very often* (5). A total score of dyadic coping was computed by calculating the mean value across the items, with higher scores indicating greater dyadic coping. The psychometric properties of the DCI have been examined in a large validation study with 2,399 participants (Gmelch et al., 2008). The internal consistencies were high and the construct and criterion validity were satisfactory. The test-retest-reliability revealed that the questionnaire is sensitive to change. The internal consistency reliability (Cronbach's alpha) in the present study was .90.

Children's adjustment. The parent participating in the study assessed their child's adjustment by completing the German version of the *Strengths and Difficulties Questionnaire* (SDQ; Klasen, Woerner, Rothenberger, & Goodman, 2003; originally developed by Goodman, 1997). We followed recommendations to use the broader three subscale structure, not the original five subscale structure, when studying low-risk samples (Goodman, Lamping, & Ploubidis, 2010). Internalizing symptoms were assessed with 10 items (e.g., "Often unhappy, depressed or tearful"), externalizing symptoms with 10 items (e.g., "Often fights with other children or bullies them"), and prosocial behavior with 5 items (e.g., "Helpful if someone is hurt, upset or feeling ill"). Response options for all items were *not true* (1), *somewhat true* (2), and *certainly true* (3). A total score for each of the three subscales was computed by calculating the mean value across the items. Higher scores indicate greater internalizing problems, externalizing problems, or prosocial behavior. The German SDQ has

shown good construct validity and reliability (Klasen et al., 2003). Internal consistencies of the subscales were α = .74 for internalizing symptoms, α = .80 for externalizing symptoms, and α = .64 for prosocial behavior.

Data analysis. To examine whether parents' dyadic coping was related to children's well-being, the three measures of child adjustment (internalizing symptoms, externalizing symptoms, and prosocial behavior) were used as separate outcome variables in a series of hierarchical multiple regression analyses (Cohen, Cohen, West, & Aiken, 2003). Children's gender, children's age, and the parent's gender were control variables, entered in the first step of the regression analyses. Dyadic coping was entered in the second step to determine its unique contribution to the explained variance in the outcome variable (ΔR^2). The interaction of dyadic coping and child's gender formed the last step to test whether the child's gender moderated the effects of dyadic coping on children's adjustment outcomes. All numerical predictors were mean centered in order to simplify the interpretation of interactions and to eliminate nonessential multicollinearity (Aiken & West, 1991).

Results

Table 1 shows the descriptive statistics for all study variables. The indicators of child adjustment were all within the typical range for not-clinically referred children (Woerner et al., 2002). The adjustment outcomes were highly intercorrelated: Internalizing and externalizing symptoms were positively correlated with each other and negatively correlated with prosocial behavior. The means of the parents' dyadic coping were relatively high in this sample, indicating good dyadic coping skills, but comparable to other studies of typical families (Bodenmann, 2008a).

The results of the regression analyses are presented in Table 2. Internalizing and externalizing symptoms were statistically predicted by the child's age, with older children showing more internalizing symptoms and fewer externalizing symptoms. Boys had statistically more externalizing symptoms (M = 1.55) than girls (M = 1.46), and girls showed

statistically more prosocial behavior (M = 2.57) than boys (M = 2.50). The parent's gender was not statistically related to the outcomes. As predicted, dyadic coping was negatively related to their children's internalizing symptoms (β = -.23, ΔR^2 = .05, p < .001) and externalizing symptoms (β = -.23, ΔR^2 = .05, p < .001), and positively related to the children's prosocial behavior (β =.13, ΔR^2 = .02, p = .013). The child's gender did not moderate the effects of dyadic coping on children's internalizing or externalizing symptoms. However, the child's gender moderated the impact of dyadic coping on children's prosocial behavior (β =.51, ΔR^2 = .03, p = .002), indicating that dyadic coping had a greater effect on girls' prosocial behavior than on boys'. According to Cohen (1988), effect sizes of R^2 < .13 are considered small effects. Thus, all effects of dyadic coping on the three target outcome variables are small.

Study 2

Method

Participants. Children were recruited by means of advertisements in newspapers or magazines and information letters for parents sent home with children from local public schools in two major Swiss cities (Zurich and Lucerne). To be included in the study, the child had to be between 11 and 13 years of age and fluent in German.

The sample of 187 children included 81 boys (43%) and 106 girls (57%). The mean age was 11.8 years (SD = 0.7). Almost all of the children (97%) lived with both their biological parents; the other six children had lived with one biological parent and one stepparent since they were toddlers.

Procedure. Children completed self-report questionnaires in a university laboratory guided by an examiner. One parent provided consent for the child and the child provided assent. The survey took between 40 and 55 minutes to complete and participation was anonymous. Children received a little present (some candy and a sticker) and a certificate for

participating in the study.

Measures.

Dyadic coping. The *Dyadic Coping Inventory* (DCI; Bodenmann, 2008a) was adapted for children to assess the children's perception of the parents' dyadic coping (Zemp & Bodenmann, 2014). Children at this age are highly sensitive to interactions between their parents and tend to provide valid reports thereof (Grych, Seid, & Fincham, 1992). Children rated eight items (e.g., "When my mom is stressed, my father undertakes tasks and chores to relieve her"; "When my father is stressed, my mother talks with him about the problem and helps to resolve it"; "When my parents are stressed they try to solve the problem jointly") on a 5-point scale ranging from *very rarely* (1) to *very often* (5). A total score of the parents' dyadic coping was computed by calculating the mean value across the items, with higher scores indicating greater dyadic coping. In the current study internal consistency reliability was $\alpha = .91$, consistent with that ($\alpha > .90$) in another study of children aged between 11 and 13 years (Zemp & Bodenmann, 2014). Children's perception of the parents' dyadic coping was statistically correlated ($r = -.31$, $p < .001$) with the *Persisting Conflict* subscale of the validated German version of the *Children's Perception of Interparental Conflict Scale* (Gödde & Walper, 2001).

Children's adjustment. Children's adjustment was assessed with the child self-report of the German version of the *Strengths and Difficulties Questionnaire* (SDQ; Klasen et al., 2003). We used the three subscale structure as recommended by Goodman, Lamping, and Ploubidis (2010) for low-risk samples. Internalizing symptoms were assessed with 10 items (e.g., "I am often unhappy, depressed or tearful"), externalizing symptoms with 10 items (e.g., "I fight a lot"), and prosocial behavior with 5 items (e.g., "I often offer to help others (parents, teachers, children)"). Response options for all items were *not true* (1), *somewhat true* (2), and *certainly true* (3). A total score of each of the three subscales was computed by calculating the mean values across the items. Higher scores indicate more internalizing problems,

externalizing problems, or prosocial behavior. Alpha coefficients were α = .70 for internalizing symptoms, α = .64 for externalizing symptoms, and α = .73 for prosocial behavior.

Data analysis. Hierarchical multiple regression analyses (Cohen et al., 2003) were used to test whether the children's perception of their parents' dyadic coping was related to children's internalizing symptoms, externalizing symptoms, and prosocial behavior. Children's gender and age were controlled by entering them in the first step of the regression analyses and dyadic coping was entered in the second step. The interaction of dyadic coping and child's gender formed the last step to test whether the child's gender moderated the effects of dyadic coping on the three measures of child adjustment. All numerical predictors were mean centered.

Results

Table 1 shows the descriptive statistics for all study variables. The indicators of child adjustment were all within the typical range for not-clinically referred children (Woerner et al., 2002). Children's internalizing and externalizing symptoms were positively correlated. Externalizing symptoms were negatively correlated with prosocial behavior.

The results of the regression analyses are depicted in Table 3. Age was positively correlated with internalizing symptoms, but was unrelated to externalizing symptoms and prosocial behavior. There were no statistical gender differences. From the child's perspective, greater parental dyadic coping was related to fewer internalizing ($\beta = -.24$, $\Delta R^2 = .06$, $p = .001$) and fewer externalizing symptoms ($\beta = -.15$, $\Delta R^2 = .02$, $p = .042$). Additionally, there was a statistical link between parental dyadic coping and greater prosocial behavior in children ($\beta = .33$, $\Delta R^2 = .11$, $p < .001$). The child's gender did not moderate the effects of dyadic coping on the three measures of child adjustment. All effects of dyadic coping on the three target outcome variables were small according to Cohen's (1988) guidelines for

interpreting R^2.

Study 3

Method

Participants. This study drew on data from 38 families who were part of a larger research project on the impact of stress on intimate relationships. Families were recruited by means of advertisements in newspapers or magazines and by radio. To be included in the study, couples had to be in their current relationship for at least one year and to have at least one child between the ages of 9 and 18 years who was willing to participate as well. If participants had more than one child in the respective age range then only the youngest child among the siblings was included in the final sample. All family members had to be fluent in German.

Thirty-eight families (parents and one child; 42% girls and 58% boys) participated in the study. In 21 families, more than one child participated but only the data related to the youngest child were included in these analyses. All children lived with their biological parents. The mean age of the children was 12.3 years (*SD* = 2.2, range = 9 – 17), of fathers was 48.2 years (*SD* = 3.2, range = 42 – 56), and of mothers was 46.8 years (*SD* = 6.2, range = 38 – 54). The majority of the couples (89%) were married; the mean relationship duration was 19.9 years (*SD* = 7.2; range = 2 – 33).

Procedure. Families were assessed in a university laboratory. After the study was introduced, parents and their child signed consent or assent forms, respectively. Children were told that their parents would be next door for the remainder of the session. Children completed a set of questionnaires guided by an examiner. The parents participated in three interaction tasks in a separate room: a standard conflict interaction task and two dyadic coping tasks. For this paper, only the data from the dyadic coping tasks were analyzed.

In the dyadic coping tasks, partners independently rated how stressful each of eight potential stressors in daily life (e.g., work, child-rearing, money) had been recently (1 = *little*

stressful to 4 = *very stressful*). From these data, the examiner identified the most stressful issue for each partner. Subsequently, one partner (determined by a coin toss) was asked to talk about the selected stressful topic for eight minutes. The couple was left alone in the laboratory room and the interaction was videotaped by a single camera positioned to capture both partners' expressions and gestures. After eight minutes, the examiner re-entered the room and asked the other partner to tell about his or her selected stressful topic for another eight minutes. At the end of the session, the couples were debriefed as to the purpose of the study and paid 110 Swiss Francs (approximately $116 in U.S. dollars). The children received a little present (some candy and a pen).

Measures.

Dyadic coping. Dyadic coping was coded from the videotapes of each couple's discussion of stressful topics. Based on the systemic-transactional model of coping among couples (Bodenmann, 1997), the coding system was developed to code supportive interactions in intimate relationships when one partner communicates his or her perceived stress (Bodenmann, 2008b). Seven different categories of verbal supportive dyadic coping were coded: empathic understanding (e.g., "I understand that this must have been very stressful"), support in revaluation (e.g., "Try to regard it as a challenge"), reassurance (e.g., "I know you hate this sort of task"), confidence (e.g., "I am sure you were doing the best you could"), encouragement (e.g., "Next time you will be better prepared"), solidarizing (e.g., "This would have been stressful for me too"), and sense of we-ness (e.g., "Together we can do it").

Each eight-minute interaction segment was rated by one of three pairs of raters, with each tape rated by two raters simultaneously, one coding the man's comments, the other coding the woman's comments. Comments were rated every 10 seconds for occurrence of the seven categories of dyadic coping as 0 (*did not occur*) or 1 (*did occur*). A total score of dyadic coping was computed by summing the number of supportive comments across the seven categories that occurred for each of the eight-minute discussions. Thus, higher scores indicate

greater dyadic coping. *Mothers' dyadic coping* is the sum of her comments when the husband presented his stressor and *fathers' dyadic coping* is the sum of his comments when the wife presented her stressor. Evidence indicates that this coding system is a valid measure of dyadic coping (e.g., Meuwly et al., 2012). Coders received at least 60 hours of training; coding was practiced with videotaped couples that were not participants in the study. At the end of the training period, all rater teams had achieved a high level of inter-rater reliability (Cohen's kappa $\geq .90$).

Children's adjustment. As in study 2, children completed the German version of the SDQ to measure their self-reported adjustment. Internal consistencies for this sample were $\alpha = .71$ for internalizing symptoms, $\alpha = .59$ for externalizing symptoms, and $\alpha = .60$ for prosocial behavior.

Data analysis. Hierarchical multiple regression analyses (Cohen et al., 2003) examined the relation between parents' dyadic coping and children's adjustment. Separate analyses were computed for mothers' and fathers' reports of dyadic coping because dyadic coping for each partner was assessed in response to a different stressor (either the wife's or the husband's). Children's gender and age were entered in the first step of the regressions and dyadic coping formed the second step. The interaction of dyadic coping and child's gender was entered in the third step to test whether the child's gender moderated the effects of dyadic coping on children's internalizing symptoms, externalizing symptoms, and prosocial behavior. All numerical predictors were mean centered.

Results

Table 1 shows the descriptive statistics for all study variables. The indicators of child adjustment were all within the typical range for not-clinically referred children (Woerner et al., 2002). Children's internalizing symptoms, externalizing symptoms, and prosocial behavior were not statistically intercorrelated.

The results of the regression analyses are shown in Table 4. The control variables

(child's age and gender) were not statistically associated with the three measures of child adjustment. The parents' dyadic coping was related with fewer externalizing symptoms (β = -.32, ΔR^2 = .10, p = .028 for mothers' dyadic coping and β = -.33, ΔR^2 = .10, p = .025 for fathers' dyadic coping, respectively). However, the association of dyadic coping and children's internalizing symptoms or prosocial behavior was not statistically related to either the mothers' or the fathers' dyadic coping. The child's gender did not moderate the effects of dyadic coping on children's internalizing symptoms, externalizing symptoms, or prosocial behavior. All effects of dyadic coping on the three target outcome variables were small (Cohen, 1988).

Discussion

The research reported here is among the first to examine how parents' dyadic coping is related to their children's psychological well-being. Parental dyadic coping was associated with children's internalizing symptoms, externalizing symptoms, and prosocial behavior across studies with different perspectives (children vs. parents) and measures of dyadic coping (self-reports vs. behavioral observation). Although the pattern of results was not consistent across the three studies, the findings suggest that parents' dyadic coping deserves substantial consideration within the context of child development. Specifically, our findings support the idea that children may experience fewer psychological problems and exhibit more social competence in families where the parents demonstrate mutual support and joint problem-solving in times of stress.

According to emotional security theory (Davies & Cummings, 1994), interparental discord harms children's development by undermining their emotional security, that is, their felt safety in the family. Parents' dyadic coping may be an important source of perceived emotional security in children. Similarly, the finding that parents' dyadic coping predicted children's prosocial behavior in two of the three studies suggests that good dyadic coping skills can model adaptive ways of interaction for children. Our results are congruent with a

study by McCoy, Cummings, and Davies (2009) that showed that positive interparental interactions are highly predictive of prosocial behavior in children. The finding in Study 1 that dyadic coping had a stronger effect on girls' prosocial behavior than on boys' might be explained by gender-differentiated socialization emphases. Girls are generally socialized to value interdependence and connectedness in social relationships while boys are often supported to develop greater independence and autonomy. Hence, gender effects are reasonable with girls being more likely to incorporate prosocial behavior from their parents than boys (Snyder, 1998). However, the support for this mechanism is somewhat limited, as the moderation effect was only statistically significant for the parents' reports but not the children's reports or the behavioral measure of dyadic coping.

The behavioral measure of dyadic coping was statistically related to only one of the three outcomes, children's externalizing symptoms. The finding that fewer externalizing symptoms were associated with parents' dyadic coping in all three studies replicates previous studies showing that the family functioning in childhood has a particular predictive power for children's externalizing problems. Psychosocial risk factors in childhood play a prominent role in the prediction of externalizing symptoms whereas risk factors occurring in early adulthood have greater predictive power for internalizing disorders (Ihle, Esser, Schmidt, & Blanz, 2002). As the majority of the children who participated in our studies ranged between the ages of 9 and 13 years, age could also explain the more robust effects for the outcome of externalizing symptoms. Younger children are more likely to express their distress in the form of externalizing behavior when faced with interparental conflict, but increasingly react by exhibiting internalizing symptoms as they grow older in adolescence (Cummings & Davies, 2002). It cannot be ruled out that measurement issues also contributed to this pattern of results. It is likely that parents are more reliable raters of their children's externalizing symptoms than of their internalizing symptoms because they are inherently better observable. It is also possible that couples were more likely to report positive behaviors than they actually

showed in the observed interactions and thus the effects for the outcomes of internalizing symptoms and prosocial behavior were not as strong. Cronbach's alphas for the SDQ subscales were not high for Study 3, which may have compromised statistical power to detect effects. Finally, shared method variances in Study 1 and Study 2 (i.e., self-reports) could entail the risk of inflated effects, a potential problem which is not present in Study 3 (self-report and behavioral measures).

Implications for Clinical Practice

Collectively, the current studies add to our current understanding of the relationship between parents' coping skills and their children's well-being. Many family-focused prevention programs already have been developed, and most of them prioritize parenting skills. It seems obvious that family interventions should address parenting (i.e., the parent-child relationship) in order to prevent or treat child maladjustment. Evidence from the parenting literature buttresses the promise of parenting training to reduce children's problem behaviors. Meta-analyses have repeatedly confirmed the efficacy of parenting-focused approaches in improving parenting skills and child adjustment (e.g., Sanders, Kirby, Tellegen, & Day, 2014). What is less obvious, however, is the idea that treatments focused on the interparental relationship (beyond parenting styles) could lead to substantial benefits for child well-being too (Emery, Fincham, & Cummings, 1992). Contemporary approaches recognize the strong influence of positive interactions in the interparental relationship on children. Hence, there is growing evidence that couple-focused interventions alone or adjunct to parenting programs are equal to or exceed parenting-only focused programs (e.g., Cowan, Cowan, & Barry, 2011; Cummings, Faircloth, Mitchell, Cummings, & Schermerhorn, 2008). The current study is congruent with previous findings that prevention or intervention programs aimed at enhancing parental dyadic coping skills may be highly beneficial for child adjustment (Bodenmann et al., 2008).

Study Limitations

Several design limitations of this study merit discussion. The most important is the correlational nature of the data; longitudinal studies are needed to examine the causal direction and whether there are reciprocal and cyclic influences between parents and children. Moreover, all study variables in Studies 1 and 2 were assessed by self-report measures inhering the risk of inflated effects because of shared method variance. Second, effect sizes (i.e., explained variation [ΔR^2] in this instance) of parents' dyadic coping was statistically significant in most cases, but effect sizes were small across the three studies, suggesting that other person-centered and family variables, for example parenting style or the parent-child relationship, may also play an important role in child adjustment. Third, the size of the sample for Study 3, only 38 families, has limited statistical power ($(1 - \beta) < .15$) for detecting small effects when internalizing symptoms or prosocial behavior are considered as outcome variables, and this may have prevented important findings from reaching statistical significance. In particular, the two-way interactions must be interpreted with caution and further studies are needed to support the stability of these findings. Fourth, the current results suggest that parents' dyadic coping is important for children's well-being, either directly or indirectly by attenuating the adverse effects of stress, although the underlying mechanisms were not tested here. This is a limitation and future studies should consider the moderating effects of dyadic coping in the link between parental stress and child adjustment. Fifth, the measure assessing children's perception of the parents' dyadic coping is new and its validity has not been fully assessed.

Conclusion

Despite these limitations, the current study has important strengths. These include examining the same phenomenon across different methods. This multi-method data support the main study hypothesis that parents' dyadic coping influences children's well-being and provides a foundation for future research. For example, it may be wise to examine how dyadic

coping can buffer the negative impact of parental stress or conflict on children. Dyadic coping is a growing area of research that has much potential for understanding children's emotional development, which merits more consideration in future studies.

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Table 1
Means, Standard Deviations, and Correlations Among Study Variables

	Mean (*SD*)	1	2	3	5	6	7	9	10	11	12
1. Parent-reported dyadic coping (Study 1)	3.64 (0.79)	-									
2. Internalizing symptoms (Study 1)	1.32 (0.31)	-.23***	-								
3. Externalizing symptoms (Study 1)	1.51 (0.35)	-.26***	.35***	-							
4. Prosocial behavior (Study 1)	2.53 (0.36)	.12*	-.21***	-.31***							
5. Child-reported dyadic coping (Study 2)	3.61 (0.88)				-						
6. Internalizing symptoms (Study 2)	1.48 (0.32)				-.25***	-					
7. Externalizing symptoms (Study 2)	1.59 (0.28)				-.15*	.47***	-				-
8. Prosocial behavior (Study 2)	2.55 (0.40)				.31***	.07	-.18*				
9. Observed dyadic coping of mothers (Study 3)	3.44 (3.08)							-			
10. Observed dyadic coping of fathers (Study 3)	3.47 (3.06)							.99***			
11. Internalizing symptoms (Study 3)	1.49 (0.32)							-.01	.00		
12. Externalizing symptoms (Study 3)	1.56 (0.26)							-.24	-.24	.27	
13. Prosocial behavior (Study 3)	2.59 (0.28)							.10	.10	-.14	-.15

Note. * $p < .05$. ** $p < 0.01$. *** $p < .001$.

Table 2

The Association Between Parents' Dyadic Coping and Child Adjustment in Study 1

	Internalizing symptoms				*Externalizing symptoms*				*Prosocial behavior*			
Predictors	R^2	ΔR^2	β	*p*	R^2	ΔR^2	β	*p*	R^2	ΔR^2	β	*p*
Step 1	.02	.02		.107	.04	.04		.002	.02	.02		.159
Child's age			.12	.020			-.14	.010			.03	.605
Child's gender			-.04	.497			-.11	.036			.11	.035
Parent's gender			-.04	.499			-.08	.155			-.04	.424
Step 2	.07	.05		< .001	.09	.05		< .001	.03	.02		.013
Dyadic coping			-.23	< .001			-.23	< .001			.13	.013
Step 3	.08	.01		.112	.10	.00		.201	.06	.03		.002
Dyadic coping x child's gender			-.25	.112			-.20	.201			.51	.002

Note. Standardized regression coefficients (β) are reported.

Table 3

The Association Between Parents' Dyadic Coping and Child Adjustment in Study 2

	Internalizing symptoms				*Externalizing symptoms*				*Prosocial behavior*			
Predictors	R^2	ΔR^2	β	*p*	R^2	ΔR^2	β	*p*	R^2	ΔR^2	β	*p*
Step 1	.03	.03		.041	.00	.00		.865	.02	.02		.240
Child's age			.18	.012			.03	.695			.12	.834
Child's gender			-.02	.785			.03	.705			-.02	.095
Step 2	.09	.06		.001	.02	.02		.042	.12	.11		< .001
Dyadic coping			-.24	.001			-.15	.042			.33	< .001
Step 3	.10	.01		.245	.03	.00		.382	.12	.00		.916
Dyadic coping x child's gender			-.25	.245			-.20	.382			.02	.916

Note. Standardized regression coefficients (β) are reported.

Table 4

The Association Between Parents' Dyadic Coping and Child Adjustment in Study 3

	Internalizing symptoms				*Externalizing symptoms*				*Prosocial behavior*			
Predictors	R^2	ΔR^2	β	*p*	R^2	ΔR^2	β	*p*	R^2	ΔR^2	β	*p*
Mothers' dyadic coping												
Step 1	.08	.08		.246	.07	.07		.301	.06	.06		.346
Child's age			-.23	.178			-.26	.128			.09	.598
Child's gender			-.21	.212			-.01	.939			.24	.153
Step 2	.08	.00		.840	.16	.10		.028	.07	.01		.599
Mothers' dyadic coping			-.04	.840			-.32	.028			.09	.599
Step 3	.10	.02		.408	.16	.00		.913	.07	.00		.806
Mothers' dyadic coping x child's gender			-.43	.408			.06	.913			-.13	.806
Fathers' dyadic coping												
Step 1	.08	.08		.246	.07	.07		.301	.06	.06		.346
Child's age			-.23	.178			-.26	.128			.09	.598
Child's gender			-.21	.212			-.01	.939			.24	.153
Step 2	.08	.00		.876	.17	.10		.025	.07	.01		.611
Father's dyadic coping			-.03	.876			-.33	.025			.09	.611
Step 3	.10	.02		.386	.17	.00		.876	.07	.00		.815
Fathers' dyadic coping x child's gender			-.45	.386			.08	.876			-.12	.815

Note. Standardized regression coefficients (β) are reported.